

Application No.: 10/576,631

Docket No.: 63162US005

Amendments to the Claims:

The following Listing of Claims will replace all prior versions and listings of claims in the application:

Listing of Claims

1. (Currently amended) A process for analyzing a biological sample containing two or more microorganisms, comprising the steps of:

(a) identifying two or more different micro-organisms present within the sample by analyzing the two or more different microorganisms' nucleic acid; and

(b) determining in parallel the effect of one or more antimicrobial(s) on the two or more different micro-organisms in the sample, wherein determining the effect of one or more selected antimicrobial(s) comprises:

adding an antimicrobial at a plurality of pre-determined concentration to individual aliquots of the sample, wherein one aliquot contains no antibiotic;

incubating the aliquots for a pre-determined time period under conditions that allow some growth of the two or more different micro-organisms; and

assessing the number of each one of the two or more microorganisms in the aliquots at the end of the pre-determined time period by analyzing the microorganisms' nucleic acid;

wherein steps (a) and (b) are performed without prior separation of the two or more microorganisms;

wherein the selected antimicrobials are selected based on the results of step (a).

2. (Original) The process of claim1, wherein step (a) involves a nucleic acid hybridization assay.

3. (Previously presented) The process of claim 1, wherein step (b) involves a nucleic acid hybridization assay.

4. (Previously presented) The process of claim 1, wherein step (a) and/or step (b) involves amplification of nucleic acid from the micro-organism.
5. (Original) The process of claim 4, wherein nucleic acid amplification uses the polymerase chain reaction.
6. (Previously presented) The process of claim 4, wherein nucleic acid amplification uses primers which are specific to a micro-organism of interest.
7. (Previously presented) The process of claim 1, wherein the micro-organism's DNA is analysed.
8. (Previously presented) The process of claim 1, wherein the micro-organism's RNA is analysed.
9. (Original) The process of claim 7 or claim 8, wherein said DNA or RNA is a rRNA or rDNA.
- 10 - 11. (Canceled)
12. (Previously presented) The process of claim 1, wherein the antimicrobial(s) used in step (b) are selected based on the results of step (a).
13. (Previously presented) The process of claim 1, wherein step (b) involves a comparison with data obtained in step (a).
14. (Previously presented) The process of claim 1, wherein the micro-organism is a bacterium, a fungus, a parasite or a virus.
15. (Previously presented) The process of claim 1, wherein the antimicrobial is an antibiotic, an antimycotic or an antiviral.

16. (Previously presented) The process of claim 2, wherein the process comprises the use of a probe.

17. (Previously presented) The process of claim 16, wherein the probe is a labelled probe.

18 - 19. (Canceled)

20. (Previously presented) The process of claim 1, further comprising assessing by DNA detection the number of one or more microorganisms in an aliquot at a plurality of time points within the pre-determined time period.